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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,876	12/28/2000	Malcolm M. Smith	062891.0423	9414
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BAKER BOTTS L.L.P. 2001 ROSS AVENUE SUITE 600 DALLAS, TX 75201-2980			EXAMINER HAN, CLEMENCE S	
			ART UNIT 2416	PAPER NUMBER
			NOTIFICATION DATE 01/23/2009	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ptomail1@bakerbotts.com  
glenda.orrantia@bakerbotts.com

### Office Action Summary

**Application No.**

09/752,876

**Applicant(s)**

SMITH, MALCOLM M.

**Examiner**

CLEMENCE HAN

**Art Unit**

2416

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5-12, 14-20, 22, 23, 25-31 and 33-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-12, 14-20, 22, 23, 25-31 and 33-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notices of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1-3, 5-12, 14-20, 22, 23 and 25-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Forsl w (US Pub. 2002/0069278).

Regarding to claim 1, Forsl w teaches a system for distributing packets for communication to a mobile unit comprising: a mobile unit 20 having a device identifier (“network address identifier (NAI)” in [0137]) and an internet protocol (IP) address comprising a first subnet identifier (“home address” in [0029]), the mobile unit roaming in a foreign network having a second subnet identifier (“care-of address” in [0029]); a mobility manager 22 operable to determine a multicast address (“workgroup 26” in [0135]) for the mobile unit based on the device identifier (“instantiating workgroup profile” in [0135], see also “instantiateWgProfile” in Figure 15), to receive multicast address requests that include the device identifier (the mobile unit 20 includes a Network address identifier (NAI) in its request [0137], and to communicate the multicast address responsive to the multicast address requests (see “setWgProfile” in Figure 15, [0135]); a

foreign agent 31 in the foreign network, the foreign agent operable to detect the mobile unit (when the mobile unit discover the foreign agent 31, the foreign agent detect the mobile unit [0137]), to determine the device identifier (NAI in [0137]) for the mobile unit, to communicate a request including the device identifier to the mobility manager (“registerMobileClient” from the foreign agent 10 to the mobility manager 22 in Figure 15, [0135]), to receive the multicast address from the mobility manager 22, and to register for a multicast group identified by the multicast address (“instantiateWgMember” in Figure 15, [0135]); and a home agent 30 operable to receive IP packets addressed to the mobile unit (“home address is the IP address where the mobile client seems to be reachable for other Internet clients and services” [0030]), to determine the multicast address associated with the mobile unit (“home agent will forward packets destined to one of the workgroups 26 as if all of the workgroup members shall receive the packet” in [0095]), to encapsulate the IP packets as payloads for multicast packets addressed to the multicast address (“the home agent redirects packets from the home network to the care-of address by constructing a new IP header” in [0031]), and to communicate the multicast packets for receipt by devices registered for the multicast group using a packet network (“when the packet arrives at the foreign agent the new header is removed and the original packet is sent to the mobile client in [0031]).

Regarding to claim 2, Forsl w teaches the device identifier as at least one of a mobile identification number (MIN) for the mobile unit and an equipment serial number (ESN) for the mobile unit [0137].

Regarding to claim 3, Forsl w teaches the foreign agent is further operable to receive the multicast packets from the packet network, to extract the IP packets from the multicast packets, and to communicate the IP packets to the mobile unit [0132].

Regarding to claim 5, Forsl w teaches the home agent 30 determines the multicast address by communicating a request including the IP address of the mobile unit to the mobility manager 22 and receiving the multicast address from the mobility manager responsive to the request [0135].

Regarding to claim 6, 14, 22 and 25, Forsl w teaches a method for registering to receive packets comprising: determining a device identifier for a mobile unit 20 [0137], the mobile unit having an internet protocol (IP) address comprising a subnet identifier for a remote network [0029]; communicating a request for a multicast address associated with the mobile unit, the request including the device identifier [0135]; receiving the multicast address [0135]; and registering for a multicast group identified by the multicast address [0135].

Regarding to claim 7, 15, 23 and 26, Forsl w teaches receiving multicast packets addressed to the multicast address, wherein the multicast packets contain information for communication to the mobile unit [0095], [0135].

Regarding to claim 8, 16 and 27, Forsl w teaches the information in the multicast packets comprising IP packets addressed to the IP address for the mobile unit [0095], [0135].

Regarding to claim 9, 17 and 28, Forsl w teaches the information in the multicast packets comprises voice information (Claim 65).

Regarding to claim 10, 18 and 29, Forsl w teaches the multicast group comprises a plurality of foreign agents 31 each receiving multicast packets containing information for communication to the mobile unit [0135].

Regarding to claim 11, 19 and 30, Forsl w teaches each of the foreign agents receiving the multicast packets communicates the information from the multicast packets to facilitate handoff of the mobile unit [0090].

Regarding to claim 12, 20 and 31, Forsl w teaches the device identifier as at least one of a mobile identification number (MIN) for the mobile unit and an equipment serial number (ESN) for the mobile unit [0137].

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forsl w et al. in view of Kim (US Patent 6,070,075).

Regarding to claim 33, Forsl w teaches a system for distributing packets for communication to a mobile unit comprising: a mobile unit 20 having a device identifier

("network address identifier (NAI)" in [0137]) and an internet protocol (IP) address comprising a first subnet identifier ("home address" in [0029]), the mobile unit roaming in a foreign network having a second subnet identifier ("care-of address" in [0029]); a mobility manager 22 operable to determine a multicast address ("workgroup 26" in [0135]) for the mobile unit based on the device identifier ("instantiating workgroup profile" in [0135], see also "instantiateWgProfile" in Figure 15), to receive multicast address requests that include the device identifier (the mobile unit 20 includes a Network address identifier (NAI) in its request [0137], and to communicate the multicast address responsive to the multicast address requests (see "setWgProfile" in Figure 15, [0135]); a foreign agent 31 in the foreign network, the foreign agent operable to detect the mobile unit (when the mobile unit discover the foreign agent 31, the foreign agent detect the mobile unit [0137]), to determine the device identifier (NAI in [0137]) for the mobile unit, to communicate a request including the device identifier to the mobility manager ("registerMobileClient" from the foreign agent 10 to the mobility manager 22 in Figure 15, [0135]), to receive the multicast address from the mobility manager 22, and to register for a multicast group identified by the multicast address ("instantiateWgMember" in Figure 15, [0135]); and a home agent 30 operable to receive IP packets addressed to the mobile unit ("home address is the IP address where the mobile client seems to be reachable for other Internet clients and services" [0030]), to determine the multicast address associated with the mobile unit ("home agent will forward packets destined to one of the workgroups 26 as if all of the workgroup members shall receive the packet" in

[0095]), to encapsulate the IP packets as payloads for multicast packets addressed to the multicast address ("the home agent redirects packets from the home network to the care-of address by constructing a new IP header" in [0031]), and to communicate the multicast packets for receipt by devices registered for the multicast group using a packet network ("when the packet arrives at the foreign agent the new header is removed and the original packet is sent to the mobile client in [0031]). Forsl w, however, does not teach the foreign agent operable to detect the mobile unit by determining that a signal strength received from the mobile unit have exceed a threshold. Kim teaches the foreign agent operable to detect the mobile unit by determining that a signal strength received from the mobile unit have exceed a threshold (Column 3 Line 1-5). It would have been obvious to one skilled in the art to modify Forsl w to have the foreign agent detect the mobile unit by determining the signal strength as taught by Kim in order to carry out hard handoff (Column 3 Line 1).

Regarding to claim 34-37, Forsl w teaches a method for registering to receive packets comprising: determining a device identifier for a mobile unit 20 [0137], the mobile unit having an internet protocol (IP) address comprising a subnet identifier for a remote network [0029]; communicating a request for a multicast address associated with the mobile unit, the request including the device identifier [0135]; receiving the multicast address [0135]; and registering for a multicast group identified by the multicast address [0135]. Forsl w, however, does not teach the foreign agent operable to detect the mobile unit by determining that a signal strength received from the mobile unit have exceed a



threshold. Kim teaches the foreign agent operable to detect the mobile unit by determining that a signal strength received from the mobile unit have exceed a threshold (Column 3 Line 1-5). It would have been obvious to one skilled in the art to modify Forsl w to have the foreign agent detect the mobile unit by determining the signal strength as taught by Kim in order to carry out hard handoff (Column 3 Line 1).

***Response to Arguments***

5. Applicant's arguments filed 10/10/2008 have been fully considered but they are not persuasive.

In response to page 8-9, the applicant argues that Forsl w does not teach foreign agent registering for multicast group identified by the multicast address. Forsl w teaches foreign agent registering for multicast group identified by the multicast address ("instantiateWgMember" in Figure 15, [0135]). The foreign agent initiates the registering by sending "registerMobileClient" in Figure 15. In response to page 9, the applicant argues that Forsl w does not teach multicast address associated with the mobile unit. Forsl w teaches the multicast address associated with the mobile unit ("home agent will forward packets destined to one of the workgroups 26 as if all of the workgroup members shall receive the packet" in [0095]). In response to page 9-10, the applicant argues that Forsl w does not teach encapsulating the IP packets as payloads for multicast packet addressed to the multicast address. Forsl w teaches encapsulating the IP packets as payloads for multicast packet addressed to the multicast address ("the home agent redirects packets from the home network to the care-of address by constructing a new IP

header" in [0031], also see [0095] for using the multicast address). Therefore, the examiner contends that the prior arts in the record teach all the limitations as recited in the claims.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CLEMENCE HAN whose telephone number is (571)272-3158. The examiner can normally be reached on Monday-Friday 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/  
Supervisory Patent Examiner, Art Unit 2416

/C. H./  
Examiner, Art Unit 2416